

Application No. 09/942,881
Attorney's Docket No. 021238-478
Page 9

REMARKS

Claims 1-74 are pending. By this Amendment, Claims 1, 4, 10-12, 15, 25 and 34 have been amended and new Claims 43-74 added. Reconsideration of the November 5, 2002 Official Action is respectfully requested.

Initially, Applicants gratefully acknowledge the opportunity to conduct an interview with Examiner Walls on February 27, 2003. The substance of the interview is incorporated in the following remarks.

Independent Claims 1, 12 and 25 have been amended to recite that the cut filler composition includes at least one additive "other than aluminum oxide". Claims 4 and 15 have been amended for consistency. New independent Claims 43, 53 and 64 recite a cut filler composition, a cigarette and a method for making a cigarette, respectively, comprising tobacco and at least one additive capable of acting as an oxidant for the conversion of carbon monoxide to carbon dioxide and/or as a catalyst for the conversion of carbon monoxide to carbon dioxide, wherein the additive is in the form of iron oxide nanoparticles.

New Claims 44-50, 54-61 and 65-72 recite the subject matter of original Claims 2, 4, 6, 8, 10, 39-40, 13, 15, 17, 19, 21, 23, 41-42, 26, 34, 27, 29, 36, 31 and 41-42, respectively. New Claims 51-52, 62-63 and 73-74 recite additives that oxidize and/or catalyze the conversion of carbon monoxide to carbon dioxide at a temperature greater than about 150°C (Claims 51, 62 and 73), or from about 200 to 600°C (Claims 52, 63 and 74). Support for the amendments can be found on page 9, lines 1-18 of the specification. As no

Application No. 09/942,881
Attorney's Docket No. 021238-478
Page 13

Attachment to Amendment Dated March 4, 2003

Appendix A - Marked up Version of Claims 1, 4, 10-12, 15, 25 and 34

1. (As Amended) A cut filler composition comprising tobacco and at least one additive other than aluminum oxide capable of acting as an oxidant for the conversion of carbon monoxide to carbon dioxide and/or as a catalyst for the conversion of carbon monoxide to carbon dioxide, wherein the additive is in the form of nanoparticles.

4. (As Amended) The cut filler composition of claim 3, wherein the additive is selected from the group consisting of Fe_2O_3 , CuO , $[\text{TiO}_2]$, CeO_2 , Ce_2O_3 , $[\text{Al}_2\text{O}_3]$, Y_2O_3 doped with zirconium, Mn_2O_3 doped with palladium, and mixtures thereof.

10. (As Amended) The cut filler composition of claim 1, wherein the additive [used in step (i)] has a surface area from about $20 \text{ m}^2/\text{g}$ to about $400 \text{ m}^2/\text{g}$.

11. (As Amended) The cut filler composition of claim 10, wherein the additive [used in step (i)] has a surface area from about $200 \text{ m}^2/\text{g}$ to about $300 \text{ m}^2/\text{g}$.

12. (As Amended) A cigarette comprising a tobacco rod, wherein the tobacco rod comprises cut filler having at least one additive other than aluminum oxide capable of acting as an oxidant for the conversion of carbon monoxide to carbon dioxide and/or as a

Application No. 09/942,881
Attorney's Docket No. 021238-478
Page 14

catalyst for the conversion of carbon monoxide to carbon dioxide, wherein the additive is in the form of nanoparticles.

15. (As Amended) The cigarette of claim 14, wherein the additive is selected from the group consisting of Fe_2O_3 , CuO , $[\text{TiO}_2]$, CeO_2 , Ce_2O_3 , $[\text{Al}_2\text{O}_3]$, Y_2O_3 doped with zirconium, Mn_2O_3 doped with palladium, and mixtures thereof.

25. (As Amended) A method of making a cigarette, comprising

(i) adding an additive other than aluminum oxide to a cut filler, wherein the additive is capable of acting as an oxidant for the conversion of carbon monoxide to carbon dioxide and/or as a catalyst for the conversion of carbon monoxide to carbon dioxide, wherein the additive is in the form of nanoparticles;

(ii) providing the cut filler comprising the additive to a cigarette making machine to form a tobacco rod; and

(iii) placing a paper wrapper around the tobacco rod to form the cigarette.

34. (As Amended) The method of claim 32, wherein the additive used in step (i) is selected from the group consisting of Fe_2O_3 , CuO , $[\text{TiO}_2]$, CeO_2 , Ce_2O_3 , $[\text{Al}_2\text{O}_3]$, Y_2O_3 doped with zirconium, Mn_2O_3 doped with palladium, and mixtures thereof.

Application No. 09/942,881
Attorney's Docket No. 021238-478
Page 11

Heim and Deevi fail to suggest the claimed combinations of features. Heim discloses an additive for tobacco products, which comprises a mixture of at least two highly dispersed metal oxides, metal oxyhydrates or mixtures thereof (Abstract and column 2, lines 42-55). However, the additive of Heim has an *absorptive* power for gases and vapors, especially tar (Abstract; column 1, lines 32-35; and column 2, lines 7-12 and lines 50-55). Heim does not suggest that the additive acts as an oxidant and/or catalyst, such as for the conversion of carbon monoxide to carbon monoxide, as claimed.

Accordingly, Heim discloses that the additive has a different principle of operation (absorption) than the claimed at least one additive (oxidation and/or catalysis). As explained at MPEP § 2143.02, page 2100-125, "[i]f the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious". Accordingly, Heim fails to support any alleged *prima facie* case of obviousness with respect to the claimed subject matter.

Deevi fails to cure Heim's deficiencies regarding the claimed subject matter. In particular, Deevi is directed to a heat source, which comprises substantially metal nitride, with smaller amounts of carbon, and metal oxide (col. 3, lines 59-63). The heat source can be used in an active element 11 of a smoking article (col. 4, lines 57-60 and FIG. 2). However, as agreed during the interview, Deevi does not suggest "a cut filler composition comprising tobacco and at least one additive other than aluminum oxide capable of acting as an oxidant for the conversion of carbon monoxide to carbon dioxide and/or as a catalyst for the conversion of carbon monoxide to carbon dioxide, wherein the additive is in the form of

Application No. 09/942,881
Attorney's Docket No. 021238-478
Page 12

form of nanoparticles", as recited in Claim 1. Deevi also fails to suggest the combinations of features of independent Claims 12 and 25. Therefore, withdrawal of the rejection is respectfully requested.

Claims 23-24 and 31-32 were rejected under 35 U.S.C. § 103 over Heim and Deevi in further view of U.S. Patent No. 4,574,821 to Fischer et al. ("Fischer"). The reasons for the rejection are stated at numbered paragraph 6 on page 5 of the Official Action. The rejection is respectfully traversed.

Claims 23-24 and 31-32 depend either directly or indirectly from independent Claims 12 and 25. Fischer fails to cure the deficiencies of Heim and Deevi with respect to Claims 12 and 25. Accordingly, the combinations of features recited in Claims 23-24 and 31-32 are patentable over the cited references. Withdrawal of the rejection is respectfully requested.

For the foregoing reasons, it is submitted that the application is in condition for allowance and such action is earnestly solicited.

Respectfully submitted,

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